CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

State of New Jersey
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Case Management
Mail Code 401-05F
P.O. Box 420
Trenton, New Jersey 08625-0420
Telephone: 609-633-1455

BOB MARTIN
Commissioner

February 27, 2017

Ricardito Vargas, Physical Scientist
Hazardous Waste Programs Branch,
Clean Air and Sustainability Division
USEPA Region 2
290 Broadway, 22nd Floor
New York, NY 10007

Re: Chevron's Ex Situ Stabilization (ESS) Implementation Workplan (IWP) for PAOC 6, December, 2016
Chevron's January 9, 2017 CD submittal addressing the NJDEP's January 3, 2017 Email Request for Additional Information
Chevron USA, Inc.
Perth Amboy, Middlesex County, New Jersey
SRP PI# 003621
RPC000005

Dear Mr. Vargas,

The New Jersey Department of Environmental Protection (Department, NJDEP) has completed review of the above documents, which was submitted pursuant to the Resource Conservation and Recovery Act (RCRA), Hazardous and Solid Waste Amendments (HSWA) Permit of 2013, and the Technical Requirements for Site Remediation at N.J.A.C. 7:26E (TRSR). The Department finds the documents acceptable.

Chevron informed the Department today that the ESS remediation PAOC 6 is complete. Therefore, please address the comments below in the next appropriate document on PAOC 6.

Soil Comments

1) Lead is not the only contaminant in PAOC 6. All other contamination must be addressed in accordance with the New Jersey TRSR.

2) Any lead-impacted soil that extends to the east side of Tank 326 and beyond Remediation Area B shall be addressed under AOC 41.

3) Assuming the sample depth in Table 1 is based on "below ground surface" (bgs), lead-impacted soil was detected in excess of the NJDEP Soil Remediation Standard at a depth of 5 feet bgs in sample S5314, found in Remediation Area D. However, the description in Section 5.2.4 for

Remediation Area D gives the maximum depth of the excavation to be 4 feet bgs. Please clarify this issue.

4) The corrective measures proposed for PAOC 6 are limited by self-imposed buffer requirements. Specifically, the excavation can only extend up to 5 feet from the existing utilities. Chevron is proposing to implement a facility-wide deed notice to address "all contaminants remaining is soil above the most stringent NJDEP Soil Remediation Standards, including lead-impacted soils located in the inaccessible areas of PAOC 6." The Department recommends that the "inaccessible areas" in PAOC 6 be remediated (ESS) at any point prior to formal site-wide closure if the reasons for the self-imposed buffer requirements are modified (i.e., pipes are removed).

Ground Water Comments

The Department's ground water comments concern LNAPL investigation and remediation. LNAPL is not discussed in the soil ESS IWP. Please note the following:

- LNAPL impacts are identified in the boring logs provided in January 2017. Since some of the logs are only 2-3' deep bgs, and are within the ESS limits identified in the IWP, the impacted zones will be removed. In these cases, deeper LNAPL impacts may exist that have not been characterized.
- Some boring locations are at upgradient or downgradient edges of the ESS IWP areas, so delineation is not complete. LNAPL impacts may be present under AST 326.
- Some impacted locations are outside of ESS IWP areas and are not addressed.
- Ground water impacts are not characterized by sampling points north of the LNAPL impacted area (P-1), or by MW-117, the closest downgradient location, which is hundreds of feet away and downgradient of utilities.
- The LNAPL borings logs of note regarding LNAPL include:

SB-0208: Sheen; TD 10' bgs
SB-0211: Sheen; TD 12' bgs
S1012: Sheen; TD 15' bgs
S1284: Sheen; TD 15' bgs
S2443: OVM
S4722: PID over 1474-2975; TD 2' bgs
S4729: PID 1751-1929; TD 2' bgs
S4730: PID 663; TD 2' bgs
S4734: PID 1519; TD 3' bgs
S4736: PID 652-1106; TD 3' bgs
S4867: PID 505-9990; TD 4.5' bgs
S4868: PID 9600 to 9999; TD 2' bgs
S5231: NAPL, PID max 2026; TD 9' bgs
S5291: NAPL, PID max 927; TD 3.5' bgs
S5292: NAPL, PID 1185-3314 3.5-4.5' bgs; TD 5' bgs
S5293: PID 1185-2109; TD 4' bgs

S5294: NAPL, PID 960-3730; TD 4' bgs
S5295: Sheen; TD 4' bgs
S5296: Sheen; TD 3' bgs
S5297: Sheen; TD 4' bgs
S5298: Sheen, NAPL, PID 840-3503; TD 4' bgs
S5313: PID 1032-3361; TD 5' bgs
S5314: NAPL, PID 872-1652; TD 5' bgs

- Other Boring Log Descriptions that are of concern include:

S0774: "gelatinous substance"
S1012: Sheen; yellow orange "organics"
S2136: Yellowish liquid with weathered petroleum on core
S2207: Yellow liquid, yellow staining, yellow staining liquid

Based on the above, remediation at PAOC 6 must address the following:

1) Describe how LNAPL and PID observations were addressed by the ESS IWP, and how any remaining impacts will be investigated and addressed.

2) Determine if any additional characterization sampling of the gelatinous, yellow staining/liquids, etc. is needed.

3) Further investigate ground water to evaluate ground water impacts and remedial actions. Existing monitor wells are not downgradient (P-1) or are too far away (MW-117) to assess impacts identified by the PAOC 6 ESS IWP. NAPL impacts may be present under AST 326.

If you have any questions, please contact me at 609-292-3007.

Sincerely,

Anne Pavelka

Anne Pavelka PG, CHMM
Case Manager
Bureau of Case Management

C: Jill Monroe, BGWPA
John Boyer, BEERA
Bob Mancini, Chevron